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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/026,758	12/27/2001	Gregg A. McClelland	8350.1647-00	9791

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EXAMINER	
CASCHERA, ANTONIO A	
ART UNIT	PAPER NUMBER
2628	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	12/19/2006	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/026,758	MCCLELLAND ET AL.	
	Examiner	Art Unit	
	Antonio A. Caschera	2628	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12 October 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-28* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-28* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *27 December 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1-7 and 25-28 are rejected under 35 U.S.C. 102(b) as being anticipated by "SolidWorks Tools – ACP4SWX Overview." (herein known as ACP4SWX) (Berlitz, Stefan. ACP4SWX software overview. (c) 2000, 2001 Stefan Berlitz. http://swtools.cad.de/us_prog_acp.htm. Date accessed 12/12/2006. (Note, the software was first issued to the public in June of 2000, see section heading, "Installation and function summary.").

In reference to claim 1, ACP4SWX discloses a method of colorizing an electronic schematic including at least one feature (see section "What is ACP4SWX", 2nd paragraph) comprising the steps of:

- obtaining a schematic generated from a feature-based parametric modeling tool (see section, "Using ACP4SWX with SolidWorks" wherein setting up colors for features, faces, component parts or assemblies is disclosed. Note, the Office interprets that since ACP4SWX can set the colors of these features, ACP4SWX must inherently obtain information or schematics of the features themselves);

- identifying a set of features associated with the schematic to be colorized (see section "Installation and function", "The main features:", 4th bullet and section "Using ACP4SWX with SolidWorks" 3rd paragraph);
- establishing a color scheme, wherein the color scheme includes a color, representing a visible wavelength in the electromagnetic spectrum, associated with at least one of the features in the set (see section "Installation and function", "The main features:", 4th bullet, section "Color management" wherein colors are described as stored in catalogue files and section "Using ACP4SWX with SolidWorks" 1st-3rd paragraphs); and
- automatically colorizing the at least one feature based on the color scheme to generate a colorized schematic (see section "Using ACP4SWX with SolidWorks" 1st-4th paragraphs).

In reference to claim 2, ACP4SWX discloses all of the claim limitations as applied to claim 1 above in addition, ACP4SWX discloses wherein each feature includes one or more elements (see section "Using ACP4SWX with SolidWorks", 3rd paragraph. Note, the Office interprets that since ACP4SWX is a tool for the feature-based modeling tool SolidWorks, allowing for colors to be associated with features, ACP4SWX inherently discloses features associated with features and these features comprising multiple elements, i.e. component parts features are made up multiple types of parts), and wherein the step of automatically colorizing the feature includes:

- associating an element with one of the features and automatically colorizing the element based on the color scheme (see section "Using ACP4SWX with

SolidWorks", 3rd paragraph. Note, the Office interprets that since ACP4SWX is a tool for the feature-based modeling tool SolidWorks, allowing for colors to be associated with features, ACP4SWX inherently discloses features associated with features and these features comprising multiple elements, i.e. component parts features are made up multiple types of parts).

In reference to claim 3, ACP4SWX discloses all of the claim limitations as applied to claim 1 above in addition, ACP4SWX discloses storing the colorized schematic in an electronic format (see section "Color Management" 1st and 2nd paragraphs).

In reference to claim 4, ACP4SWX discloses all of the claim limitations as applied to claim 3 above in addition, ACP4SWX discloses storing the association between the color and the feature (see section "Color management" and "Using ACP4SWX with SolidWorks" storing the association of colors to features in catalogue files). ACP4SWX also discloses obtaining a color from a different or revised schematic (see section "Using ACP4SWX with SolidWorks", screen shot selection "Get color scheme from SolidWorks"). ACP4SWX discloses applying the associated color to a different or revised schematic (see section "Using ACP4SWX with SolidWorks", screen shot selection "Set color scheme from SolidWorks"). Note, the Office interprets ACP4SWX to inherently determine only those color-to-feature associations that differ from the previous schematic to the new/different or revised schematic and only change and associate those features. ACP4SWX also discloses automatically coloring the element based on the color scheme (see section "Using ACP4SWX with SolidWorks" 1st-4th paragraphs).

In reference to claim 5, ACP4SWX discloses all of the claim limitations as applied to claim 2 above in addition, ACP4SWX discloses:

- selecting a feature; and selecting at least one element on the schematic to be associated with the selected feature (see section "Installation and function", "The main features:", 4th bullet and section "Using ACP4SWX with SolidWorks" 1st-4th paragraphs. The Office interprets that since a color can be applied to features by ACP4SWX, therefore ACP4SWX inherently discloses selecting a feature to associate the color to. Further, the Office interprets that since ACP4SWX is a tool for the feature-based modeling tool SolidWorks, allowing for colors to be associated with features, ACP4SWX inherently discloses features associated with features and these features comprising multiple elements, i.e. component parts features are made up multiple types of parts).

In reference to claim 6, ACP4SWX discloses all of the claim limitations as applied to claim 5 above in addition, ACP4SWX discloses selecting at least one element in a visual representation of the schematic (see section "Installation and function", "The main features:", 4th bullet and section "Using ACP4SWX with SolidWorks" 1st-4th paragraphs. The Office interprets that since a color can be applied to features by ACP4SWX, therefore ACP4SWX inherently discloses selecting a feature to associate the color to).

In reference to claim 7, ACP4SWX discloses all of the claim limitations as applied to claim 5 above in addition, ACP4SWX discloses entering one or more labels associated with the elements in step of selecting at least one element on the schematic (see section "Color management" wherein a label name of a color can be entered. Further, such color can be applied to the features which, as explained above, comprise of multiple elements).

In reference to claim 25, ACP4SWX discloses all of the claim limitations as applied to claim 1 above in addition, ACP4SWX discloses wherein colors are associated with features, the color being first, second and third colors (see section "Color management" and section "Using ACP4SWX with SolidWorks" 1st-3rd paragraphs).

In reference to claim 26, ACP4SWX discloses all of the claim limitations as applied to claim 1 above in addition, ACP4SWX discloses wherein establishing a color scheme includes receiving information from a user for establishing the color scheme (see section "Color management" and section "Using ACP4SWX with SolidWorks." It can be seen that ACP4SWX includes a GUI which requires information input by a user).

In reference to claim 27, ACP4SWX discloses all of the claim limitations as applied to claim 1 above in addition, ACP4SWX discloses wherein establishing a color scheme includes receiving information form a user for associating the color with at least one of the features in the set see section "Color management" and section "Using ACP4SWX with SolidWorks", 1st-3rd paragraphs. It can be seen that ACP4SWX includes a GUI which requires information input by a user).

In reference to claim 28, ACP4SWX discloses all of the claim limitations as applied to claim 1 above in addition, ACP4SWX discloses wherein automatically colorizing the at least one feature based on the color scheme to generate a colorized schematic includes automatically colorizing the at least one feature based on the color scheme and based on a user input (see section "Using ACP4SWX with SolidWorks", 3rd paragraph. It can be seen that ACP4SWX includes a GUI which requires information input by a user).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 8-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over "SolidWorks Tools – ACP4SWX Overview." (herein known as ACP4SWX) (Berlitz, Stefan. ACP4SWX software overview. (c) 2000, 2001 Stefan Berlitz. http://swtools.cad.de/us_prog_acp.htm. Date accessed 12/12/2006. (Note, the software was first issued to the public in June of 2000, see section heading, "Installation and function summary.").

In reference to claim 8, ACP4SWX discloses a method of colorizing an electronic schematic including at least one feature (see section "What is ACP4SWX", 2nd paragraph) comprising the steps of:

- obtaining a schematic generated from a feature-based parametric modeling tool (see section, "Using ACP4SWX with SolidWorks" wherein setting up colors for features, faces, component parts or assemblies is disclosed. Note, the Office interprets that since ACP4SWX can set the colors of these features, ACP4SWX must inherently obtain information or schematics of the features themselves);
- identifying a set of features associated with the schematic to be colorized (see section "Installation and function", "The main features:", 4th bullet, section "Color management" wherein colors are described as stored in catalogue files and section "Using ACP4SWX with SolidWorks" 1st-3rd paragraphs);;

- establishing a color scheme, wherein the color scheme includes a color, representing a visible wavelength in the electromagnetic spectrum, associated with at least one of the features in the set (see section "Installation and function", "The main features:", 4th bullet, section "Color management" wherein colors are described as stored in catalogue files and section "Using ACP4SWX with SolidWorks" 1st-3rd paragraphs); and
- automatically colorizing the at least one feature based on the color scheme to generate a colorized schematic (see section "Using ACP4SWX with SolidWorks" 1st-4th paragraphs).

ACP4SWX does not explicitly disclose a computer-readable medium including instructions for performing a method of colorizing a schematic. It is well known in the art of computer graphics processing to store software, such as the software disclosed by ACP4SWX, on some type of computer-readable medium (i.e. RAM, ROM, hard drive, floppy disk, cd-rom etc) (Official Notice). It is would have been obvious to one of ordinary skill in the art for ACP4SWX who teaches the methods of a software tool accompanying a CAD program, to store the program on some type of computer-readable medium, because it is well known in the art that programs are stored on computer-readable medium in order for computer processors to execute these programs.

In reference to claim 9, ACP4SWX discloses all of the claim limitations as applied to claim 8 above. Claim 9 is similar in scope to claim 2 and is therefore rejected under equivalent rationale.

In reference to claim 10, ACP4SWX discloses all of the claim limitations as applied to claim 9 above. Claim 10 is similar in scope to claim 3 and is therefore rejected under equivalent rationale.

In reference to claim 11, ACP4SWX discloses all of the claim limitations as applied to claim 10 above. Claim 11 is similar in scope to claim 4 and is therefore rejected under equivalent rationale.

In reference to claim 12, ACP4SWX discloses all of the claim limitations as applied to claim 8 above. Claim 12 is similar in scope to claim 5 and is therefore rejected under equivalent rationale.

In reference to claim 13, ACP4SWX discloses all of the claim limitations as applied to claim 12 above. Claim 13 is similar in scope to claim 6 and is therefore rejected under equivalent rationale.

In reference to claim 14, ACP4SWX discloses all of the claim limitations as applied to claim 12 above. Claim 14 is similar in scope to claim 7 and is therefore rejected under equivalent rationale.

3. Claims 15-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over "SolidWorks Tools – ACP4SWX Overview." (herein known as ACP4SWX) (Berlitz, Stefan. ACP4SWX software overview. (c) 2000, 2001 Stefan Berlitz. http://swtools.cad.de/us_prog_acp.htm. Date accessed 12/12/2006. (Note, the software was first issued to the public in June of 2000, see section heading, "Installation and function summary.") in view of Maeda et al. (U.S. Patent 5,966,310).

In reference to claims 15 and 22, ACP4SWX discloses a method configured to colorize an electronic schematic including all of the steps disclosed above including obtaining a schematic generated from a feature-based parametric modeling tool (see section "What is ACP4SWX", 2nd paragraph, "Using ACP4SWX with SolidWorks" wherein setting up colors for features, faces, component parts or assemblies is disclosed. Note, the Office interprets that since ACP4SWX can set the colors of these features, ACP4SWX must inherently obtain information or schematics of the features themselves, section "Installation and function", "The main features:", 4th bullet, section "Color management" wherein colors are described as stored in catalogue files and section "Using ACP4SWX with SolidWorks" 1st-3rd paragraphs and section "Using ACP4SWX with SolidWorks" 1st-4th paragraphs). ACP4SWX does not explicitly disclose the system components however Maeda does. Maeda discloses a personal design CAD system (see column 1, lines 10-15 and column 2, lines 34-47) comprising:

- a processor (see column 13, lines 29-30, Maeda discloses the invention embodied on a personal computer which inherently comprises a processor; and
- a memory (column 2, lines 63-65 and #26 and 131 of Figure 3)), wherein the memory includes
- a colorization module configured to colorize the schematic to generate a colorized schematic (column 14, lines 14-35 and #122 of Figure 3).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the system of Maeda et al. with the color tool CAD associated methods of ACP4SWX in order to create a system, conforming to a user, for performing a series of processing including the design of the appearance and production of mechanical/electrical

equipment (see column 2, lines 3-12 of Maeda et al.). Further, in reference to claim 22, claim 22 comprises the "identifying", "establishing" and "colorizing" elements as seen in claim 8 above and therefore these elements are rejected under equivalent rationale as seen above.

In reference to claim 16, ACP4SWX and Maeda et al. disclose all of the claim limitations as applied to claim 15 above. Although both ACP4SWX and Maeda et al. disclose utilizing a CAD tool/software, neither ACP4SWX nor Maeda et al. explicitly disclose the module including a Pro-Engineer software application in memory. It is well known in the art of computer graphics processing to store software, such as the software disclosed by AutoCAD 2000, on some type of memory (i.e. RAM, ROM, hard drive, floppy disk, cd-rom etc) (Official Notice). It is would have been obvious to one of ordinary skill in the art for ACP4SWX who teaches the methods of a software tool accompanying a CAD program, to store the program on some type of computer memory, because it is well known in the art that programs are stored on computer-readable mediums in order for computer processors to execute these programs. Further note, the Office interprets that in order to utilize the functions of the ACP4SWX software program, a feature-based parametric modeling tool named SolidWorks must be executed and utilized. The Office sees such a modeling tool, functionally equivalent to the Pro-Engineer software application of the claim especially since Applicant makes such an equivalence in Applicant's latest Remarks, see pages 3-4.

In reference to claim 17, ACP4SWX and Maeda et al. disclose all of the claim limitations as applied to claim 15 above. Maeda et al. also discloses wherein the colorization module is software configured to work with the modeling module during colorization of the schematic (see column 9, lines 34-38, the CAD module is configured to work with graphics module).

In reference to claim 18, ACP4SWX and Maeda et al. disclose all of the claim limitations as applied to claim 15 above. Maeda et al. discloses the CAD invention embodied on a personal computer (see column 13, lines 29-30) which the Office interprets as inherently comprising an "output module" since Maeda et al. also discloses providing the output to a display (see column 9, lines 39-40 and #145 of Figure 4).

In reference to claim 19, ACP4SWX and Maeda et al. disclose all of the claim limitations as applied to claim 15 above. Maeda et al. also discloses including an input module for accepting inputs from one or more of a keyboard, point-and-click device or an storage medium reader (see column 8, lines 58-62 and #11 of Figure 3).

In reference to claim 20, ACP4SWX and Maeda et al. disclose all of the claim limitations as applied to claim 15 above. Claim 20 is similar in scope to 8 above and is therefore rejected under equivalent rationale.

In reference to claims 21 and 24, ACP4SWX discloses all of the claim limitations as applied to claims 20 and 22 respectively above. Claims 21 and 24 are similar in scope to claim 4 and are therefore rejected under equivalent rationale.

In reference to claim 23, ACP4SWX and Maeda et al. disclose all of the claim limitations as applied to claim 22 above. Claim 23 is similar in scope to claim 2 and is therefore rejected under equivalent rationale.

Response to Arguments

4. Applicant's arguments, see pages 2-6 of Applicant's Remarks, filed 10/12/06, with respect to the rejection(s) of claim(s) 1-3, 5-10, 12-20, 22, 23 and 25-28 under 35 USC 102(b), in

view of Burchard et al., have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of ACP4SWX.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Antonio Caschera whose telephone number is (571) 272-7781. The examiner can normally be reached Monday-Thursday and alternate Fridays between 7:00 AM and 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kee Tung, can be reached at (571) 272-7794.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

571-273-8300 (Central Fax)

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (571) 272-2600.

aac
12/14/06

Antonio Caschera
Patent Examiner

MARK ZIMMERMAN
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